

## CLAIMS

1. A method for intercepting user exit interfaces in IMS programs, comprising:
  - installing a program library at a user computer as the first library in an IMS program library concatenation, the program library including an interception routine;
  - dynamically loading an interface routine at the IMS system server; and
  - wherein the interception routine communicates with the interface routine to resolve name ambiguity and enable simultaneous use of a single exit by plural users.
2. The method of Claim 1, further comprising:
  - passing control from an IMS program at the IMS system server to the interface routine.
3. The method of Claim 2, further comprising:
  - receiving control at the interception routine from the IMS program.
4. The method of Claim 3, further comprising:
  - establishing the interception routine as a user exit routine.

5. The method of Claim 4, further comprising:
  - obtaining the name of each library in an IMS program library concatenation at the interception routine.
6. The method of Claim 5, further comprising:
  - dynamically allocating each library in the IMS program library concatenation as a separately accessible file at the interception routine.
7. The method of Claim 6, further comprising:
  - determining of any of the libraries includes a load module with the same name as the interface routine; and
  - flagging a first block of a matching load module as a "candidate user-exit."
8. The method of Claim 7, further comprising:
  - comparing a "candidate user-exit" load module to a predetermined interception routine "eye-catcher"; and
  - treating a non-matching "candidate user-exit" load module as a user exit routine.
9. The method of Claim 8, further comprising:
  - obtaining storage at the IMS system server;
  - bringing the user exit routine into memory; and

issuing a directed load for the user exit routine.

10. The method of Claim 9, further comprising:

passing control the user exit routine.

11. A system for intercepting user exist interfaces in IMS programs, comprising:

at least one IMS system server;

at least one user computer communicating with the IMS system server;

an interface routine residing in the IMS system server;

an interception routine residing in the IMS system server;

wherein the interface routine and the interception routine include logic means for:

communicating between the interface routine and the interception routine to resolve name ambiguity and enable simultaneous use of a single exit by plural users.

12. The system of Claim 11, wherein the interface routine and the interception routine further include logic means for:

passing control from an IMS program at the IMS system server to the interface routine.

13. The system of Claim 12, wherein the interface routine and the interception routine further include logic means for:

receiving control at the interception routine from the IMS program.

14. The system of Claim 13, wherein the interface routine and the interception routine further include logic means for:

establishing the interception routine as a user exit routine.

15. The system of Claim 14, wherein the interface routine and the interception routine further include logic means for:

obtaining the names of the libraries in a IMS program library  
concatenation at the interception routine.

16. The system of Claim 15, wherein the interface routine and the interception routine further include logic means for:

dynamically allocating each library in the IMS program library  
concatenation as a separately accessible file at the interception routine.

17. The system of Claim 16, wherein the interface routine and the interception routine further include logic means for:

determining whether any of the libraries includes a load module with the  
same name as the interface routine; and

flagging a first block of a matching load module as a "candidate user-exit."

18. The system of Claim 17, wherein the interface routine and the interception routine further include logic means for:

comparing a "candidate user-exit" load module to a predetermined  
interception routine "eye-catcher;" and  
treating a non-matching "candidate user-exit" load module as a user exit  
routine.

19. The system of Claim 18, wherein the interface routine and the interception routine further include logic means for:

obtaining storage at the IMS system server;  
bringing the user exit routine into memory; and  
issuing a directed load for the user exit routine.

20. The system of Claim 19, wherein the interface routine and the interception routine further include logic means for:

passing control the user exit routine.

21. A computer program device for intercepting user exit interfaces in IMS programs, comprising:

logic means for communicating between an interception routine and an interface routine to resolve name ambiguity and enable simultaneous use of a single exit by plural users.

22. The computer program device of Claim 21, further comprising logic means for:  
passing control from an IMS program at the IMS system server to the interface routine.

23. The computer program device of Claim 22, further comprising logic means for:  
receiving control at the interception routine from the IMS program.

24. The computer program device of Claim 23, further comprising logic means for:  
establishing the interception routine as a user exit routine.

25. The computer program device of Claim 24, further comprising logic means for:  
obtaining the names of the libraries in a IMS program library  
concatenation at the interception routine.

26. The computer program device of Claim 25, further comprising logic means for:  
dynamically allocating each library in the IMS program library  
concatenation as a separately accessible file at the interception routine.

27. The computer program device of Claim 26, further comprising logic means for:
- determining if any of the libraries includes a load module with the same name as the interface routine; and
  - flagging a first block of a matching load module as a "candidate user-exit."
28. The computer program device of Claim 27, further comprising logic means for:
- comparing a "candidate user-exit" load module to a predetermined interception routine "eye-catcher;" and
  - treating a non-matching "candidate user-exit" load module as a user exit routine.
29. The computer program device of Claim 28, further comprising logic means for:
- obtaining storage at the IMS system server;
  - bringing the user exit routine into memory; and
  - issuing a directed load for the user exit routine.
30. The computer program device of Claim 29, further comprising logic means for:
- passing control the user exit routine.